

Amendments to the Claims:

The following Listing of Claims replaces all previous versions and listings of the claims in this application.

Listing of Claims:

1-10 (Cancelled).

11 (Currently Amended): Crystals of a cytokine receptor protein of the Class I Cytokine family, modified in the extracellular domain, wherein at least one terminal molecule segment which contributes to a disordered structure is deleted, the modified protein being capable of being crystallized without being complexed to a ligand molecule, according to any of claims 1 to 10 to any of claims 1-10 suitable for binding studies with ligand candidates.

12 (Currently Amended): Crystals according to claim 11, wherein the contact surface between two molecules is between 200 to 1800 Å² (square ångström) ~~and more preferably between 100 to 900 Å² (square ångström).~~

13 (Currently Amended): Crystals according to claim 11 ~~or 12~~ containing at least 50 % (v/v) of a solvent acceptable for binding studies.

14 (Original): Crystals according to claim 13 containing about 60 to 80 % (v/v) of a solvent.

15 (Currently Amended): Crystals according to claim 11 ~~any of claims 11 to 14~~ capable of being frozen with gaseous or liquid nitrogen with maintained capacity of diffraction to at least 3.5 Å by using synchrotron radiation source.

16 (Currently Amended): Crystals according to claim 15 capable of being frozen with gaseous or liquid nitrogen with maintained capacity of diffraction to at least 2.3 ~~3-5~~ Å by using synchrotron radiation source.

17 (Currently Amended): Crystals according to claim 11 ~~any of claims 11 to 16~~ capable of being resistant to an addition of up to 10% (v/v) of DMSO (dimethylsulfoxide) and up to 5 % (v/v) of DMF (dimethylfluoride) for at least 24 hours.

18 (Currently Amended): Crystals according to claim 11, ~~any of claims 11 to 17~~ ~~characterized in that they are~~ formed at pH between 5.0 to 8.5.

19 (Currently Amended): Crystals according to claim 18, ~~characterized in that they~~ ~~are~~ formed at a pH between 7.0 and 8.0.

20 (Currently Amended): Crystals according to claim 11, ~~any of claims 11 to 17~~ formed in the presence of one or more salts having a concentration between 0.15 M and 1.0 M.

21 (Original): Crystals according to claim 20, wherein the salt(s) is(are) selected from a group consisting of ammonium sulfate, lithium sulfate, sodium phosphate, potassium phosphate, sodium chloride, lithium chloride, ammonium acetate, sodium acetate, magnesium chloride, sodium formate and sodium citrate.

22-25 (Cancelled).

26 (Currently Amended): A method of obtaining improved cytokine receptor crystals of a cytokine receptor protein of the Class I Cytokine family involving the ~~subsequent~~ steps of:

- (i) solving the receptor three-dimensional structure complexed to a ligand by crystallographic methods,
- (ii) identifying at least one terminal molecule segment ~~regions~~ of the receptor molecule which contributes ~~may contribute~~ to disorder in a crystalline state,
- (iii) producing modified receptor molecules without said segment ~~regions~~, and
- (iv) crystallizing the modified receptor without the presence of a ligand.

27 (Currently Amended): A method according to claim 26, wherein said segment is in ~~involving~~ the extracellular part of the receptor.

28 (Currently Amended): A method according to claim 26 ~~or 27~~, wherein said receptor is human growth hormone receptor.

29 (Original): A method according to claim 28, wherein said ligand is human growth hormone.

30 (New): Crystals according to claim 12, wherein the contact surface between two molecules is between 100 to 900 Å² (square Ångström).

31 (New): Crystals according to claim 11, wherein the cytokine receptor protein is human growth hormone receptor (hGHR) consisting of residues 32-237 (SEQ ID NO: 2), 32-234 (SEQ ID NO: 3), or 34-233 (SEQ ID NO: 4), of the native hGHR molecule.

32 (New): Crystals according to claim 11, wherein the cytokine receptor protein is human growth hormone receptor (hGHR) consisting of residues 32-237 (SEQ ID NO: 2), of the native hGHR molecule.